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ABSTRACT

For English educators, the censorship issue is more than reactively attending to censors; it is really an issue of what a member of the profession does, where responsibilities lie. English educators must struggle to provide literary experience, aesthetic language experience, and promote writing as dialogue in a social context. Limiting and controlling forms of language experience are as much a censorship threat as limitations on the content of teaching. Most importantly, English educators must resist increasing attempts to reconceptualize human thinking and behavior in technological terms. Two recent developments in educational thinking threaten the aesthetic domain of English teaching, both emanating from technological reconceptualizations of human activity. One trend is the use of cognitive science models, primarily from computer models of thinking, for educational psychology. The other is the continuing use of technical models for school curriculum, especially now that cognitive science precepts are used to legitimate those models. One of the best recent examples of the application of technical rationality to an educational problem is the argument put forth by E. D. Hirsch, Jr., which has resulted in "Cultural Literacy: What Every American Needs to Know." Hirsch's emphasis on "memorization" of cultural data is a computer programmer's idea of how thinking works. English educators, however, need to promote "creative" writing and aesthetic reading in the curriculum, based on models of human learning, not on reductionist computer models. (Twenty-eight references are attached.) (KEH)

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In Defense of the Aesthetic:

The Role of English Educators in Defining Culture and Fighting Censorship

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Session K14: How Censors Would Limit our Literacy and What Teachers Should Know in Order to Combat Them

Intellectual Freedom and the Nature of Censorship

The censorship battle being carried on in America is a battle over cultural definition and intellectual freedom. Censors do not want certain books (or other media) merely removed from classrooms, censors want those materials banished from the culture. Censorship attempts are about control of the culture; and, unlike educators, who tend to define the parameters of culture, censors wish to limit the content and the form of the culture as a means to control the behavior of others.

For English Educators, the censorship issue is more than reactively attending to censors; it is really an issue of what we do as a profession, where our responsibilities lie. Censorship is an attack on literature and creative expression in general. Fundamentalist religious censors do not believe in reading much more than the Bible (the rest is vainglorious secular humanist philosophy), while censors from other traditions wish to control the way in which children and adolescents (and adults for that matter) read the books they are allowed to read. The student's and the teacher's intellectual freedom are in danger when "approved" commentaries and interpretations are insisted upon or enforced. Censorship is anti-intellectual

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in nature: censors mean to keep certain ideas out of public discourse and to lock up individual expression in the mind.

English Educators, and especially organizations of English Educators such as the Conference on English Education, must struggle to provide literary experience, aesthetic language experience, and promote writing as dialogue in a social context. Limiting, and controlling, forms of language experience are as much a censorship threat as limitations on the content of teaching. And, most importantly, English Educators must resist the increasing attempts to reconceptualize human thinking and behavior in technological forms, structures that are controlling and limiting by their very nature.

Functions of English Education

The function of English studies, and the special province of those who teach (and therefore define) it, is the preservation of the aesthetic in the face of technological reductionism and anti-humanistic social philosophy. As to the responsibilities of English Educators in the modern world, I would argue the following:

- The primary function and justification of English teaching is the promotion of aesthetic experience and aesthetic forms of linguistic development.
- Aesthetic language experience is necessary to cognitive growth and aesthetic experience in general is necessary for cultural understanding.
- Questions about censorship in the English classroom should be concerned with linguistic form as much as with content.
- Certain forms of linguistic behavior are antithetical to aesthetic experience, and since aesthetic forms are necessary to language development

and an integral part of human culture, promotion of non-aesthetic forms for aesthetic activities (such as literature study) is a form of censorship.

English Educators perform their roles by preserving and promoting aesthetic forms in the culture, both aesthetic forms of thinking and aesthetic forms of respresentation. If we accept John Dewey's "process" definition of culture, "the capacity for constantly expanding the range and accuracy of one's perceptions of meanings," rather than a static "content" idea of culture, then we can acknowledge the role of aesthetic experience, and our responsibility, as English teachers, to the culture is clear (Democracy and Education 145).

The common conservative criticism that it is Dewey's "content-neutral" educational philosophy that is somehow responsible for the sorry state of American education has been revived in most of the recent conservative reform proposals, most notably in E. D. Hirsch, Jr.'s Cultural Literacy (19). What I will argue later in this chapter is that conservative education critics subscribe to the notion that the process of education is "neutral," i. e., a technological delivery system, and it is precisely this false notion of neutrality in the form of education that presents the greatest threat to culture.

Given Dewey's definition, I would like to offer this definition of a censor: a censor is someone who seeks to limit the cultural experience of another through the use of limiting forms of thought and language, or who limits access to creative expression. Censors seek ways to control the experience of others. Traditionally we have loooked only at the censor who prohibits access to cultural content; I suggest we need to look at limiting forms of experience promoted by various educational (and social) authorities as well.

Two recent developments in educational thinking threaten the aesthetic domain of English teaching, both emanating from technological reconceptualizations of human activity. One trend is the use of cognitive science (or artificial intelligence) models, primarily from computer models of thinking, for educational psychology. The other is the continuing use of technical models for school curriculum, especially now that cognitive science precepts are used to legitimate those models. This threat isn't a new one, just a re-emerging one. Even Matthew Arnold, the progenitor of modern English teaching, warned that, "Faith in machinery is . . . our besetting danger. . . " (Culture & Anarchy 49). The main point I would argue is that our "faith in machinery" as educational practice is a form of social control and linguistic deprivation, and therefore, a form of censorship that we as teachers frequently, though unwittingly, support.

English Educators are responsible for monitoring and resisting the invasion of technical rationality into the English classroom. Technical rationality is a form of logic and thinking defined by technological reconceptualizations of human activity, informed by theories of technology. Technical rationality, also referred to as "technique," to paraphrase Jacques Ellul, ". . . is the rational and unblinking search for increased efficiency and greater productivity" (Burnham 6). Technical rationality applies technological form to human activities, especially behavior (social or behavioral engineering) and cognition (artificial intelligence and cognitive science).

David Dobrin's recent examination of the invasion of "technique" in the writing field raises serious questions about the limitations of technical forms in composition instruction. I've written about the misuse of technical rationality in the teaching of reading and literature on several occasions.

And, the limiting effects of technical rationality on professional development in general has recently been explored by Donald Schön. Technical rationality is not a future threat, but a real and pressing threat to humanistic conceptions of education.

Technical rationality applied to human behavior is a limiting conception of human behavior, and, as theories of technology suggest, designed more for control than growth. English Educators' primary responsibility to the culture is not the technical; in fact, English Educators may be the only hope for the promotion of aesthetic language experience in American culture. Resisting technical rationality does not mean abandoning the use of computers in English class, only that English teachers should be wary of prophets espousing technological views of humans, especially when they use computer models as an "explanation" of human cognition.

Technical Rationality in the Curriculum

Technical rationality has now produced the new field of cognitive science, a field in which computer science models of human behavior and thinking are used to describe and explain human thinking and behavior. Cognitive science presents us with a new version of the psychology and sociology that produced teacher-proof (as in "idiot proof") materials, experts dictating the curriculum (what is an "expert-system," one of the hallmarks of artificial intelligence research, after all?), and teaching machines and electronic workbooks (think about the fruits of computers for English class outside of word-processing, which is a text management system.)

Technological visions of process, information-processing visions of thinking, and technical modes of communication and systems of thought are based on certain primary traits of technology:

• All systems can be broken done into (or, reduced to) discrete sequential (and often hierarchical) steps, and concepts are reducible to discrete components.

• Technical systems of communication and thinking are designed to control information and ideas, not generate them.

• Technical systems produce monological systems of communication, i.e., one-way, anti-dialogical or non-dialogical communication.

One of the best recent examples of the application of technical rationality to an educational problem is the argument put forth by E. D. Hirsch, Jr. which has resulted in Cultural Literacy: What Every American Needs to Know (1988). Hirsch's curriculum and instruction model is defined by technical rationality, and governed by the theories of technology cited above. Hirsch doesn't need a Metropolis-inspired machine environment to bring his technical system to fruition, all he needs is the technology of the printing press combined with the technology of cognitive science and technically-determined systematic instruction. But I would be remiss if I didn't point out that Hirsch's model would be easy to build into a computer program. His emphasis on early "memorization" of cultural data (by third grade all the "baseline" cultural data is assimilated) is a computer programmer's idea of how thinking (i.e., information processing) works, and cognitive scientists draw heavily on computer modelling.

If Hirsch said we need to enter schematic data into the memory banks of our children in order to program them in a socially-controlled way to support the labor needs of the military-industrial complex, the membership of NCTE would be after Hirsch with rakes and pitchforks. If he says we need prior knowledge as a necessary condition for cultural literary to assure our competitive edge in world markets, we say he has a "point."

I do want to point out that most professionals in the field of English Education have reservations about the "cultural literacy" model. NCTE has recently a passed a resolution concerning basal readers (which are a product of technical rationality) as a substitute for children's literature, and a resolution questioning the implications of the notion of cultural literacy (NCTE 1988). And, the point that English Educators tend to concede to Hirsch (and other traditionalist revisionists) is the notion that, in Hirsch's words, "literate content is absolutely essential to the higher skills of reading, learning, and thinking" (EL, September 1988, p. 19). Of course, this statement ignores method, and the method of Hirsch's educational model is what is at issue. Hirsch's contention that the specific content of the list doesn't matter further reinforces his true emphasis on method: memorization of cultural knowledge (or in the cognitive science jargon: programmed input of cultural data) is the key educational concept in Cultural Literacy.

Hirsch is misdirected because the form he presents limits possibilities for learning to read to culturally approved forms as well as content. He doesn't talk about method because it reveals the controlling, and limiting nature, of the model he employs. Also, learning in a technical mode does not prepare one to learn in an aesthetic mode (just as reading basals does not prepare one to read literature in an aesthetic way). He is only presenting one-half of the curriculum, the technical half, then claiming that the other half of the curriculum is dependent upon it. He also claims that form of instruction is unimportant (as long as it is "learned," by which he means memorized), strongly suggesting that he believes the process is neutral, or technical, in nature. He is using a data processing model, not a constructivist thinking model.

Reading research in general is becoming increasingly immeshed in cognitive science models (e. g., R. C. Anderson's work, from whom Hirsch draws much of his reading research, see Cultural Literacy 51; also see Smith), as is some important writing research (e. g., Flower and Hayes, see Dobrin for a critique); though we must keep in mind that reading as a "skill," reading as separate from literature study, is just a technological re-conceptualization of literature study anyway. Hirsch himself talks in cognitive science jargon, borrowed from reading research: " integrated chunks;" "If an intellectual problem demands a grasp of more than five or six elements . . .;" "habitual schemata;" "cognitive overload;" etc., ((Cultural Literacy, 55, 68; "The Best Answer" 19). He even says, "the floppy disks in our minds would quickly fill to capacity, and we would have to erase them periodically," at one point (Cultural Literacy, 36). He quotes extensively from AI researcher Herbert Simon's work, and claims unequivically that "AI models actually work" (Cultural Literacy, 60, 62). For what? For whom? With what consequences? There is considerable debate, and less certainty, about the efficacy of AI models in the scientific community (Gardner, Johnson).

Hirsch draws on reading model, not a literary response model [an issue raised about Becoming a Nation of Readers, discussed below (Sims, in Davidson 63)]. As I have argued previously, most of the reading research, and especially its practice, in the 20th century represents a technological reconceptualization of literature study. Hirsch could be said to misuse recent research in reading, but he claims that R. C. Anderson approves of his application of the research coming out of the Center for Research on Reading, the research that defined much of the report for the Commission on Reading's report, Becoming a Nation of Readers (viii).

In a recent NCTE monograph certain anomalies are pointed out within the report, especially that: "One of the major problems with BNR is the inconsistency between the theory of reading espoused and the suggestions made for beginning reading instruction" (Bridge, in Davidson 51 -52). I would submit that the discrepancy between the seemingly holistic description of human reading behavior and the suggested remedies, which appear atomistic, is that the technical rationality philosophy of the AI models is invoked for some of the research, resulting in a "quality control metaphor [suggesting] standardization of the instruction and of the processes and products of reading instruction. . ." (Bloome, et. al., in Davidson 8).

Technical rationality, of which Hirsch's cultural literacy model has all the characteristics, makes it appear logical that writing is learned by first mastering the sentence, then the paragraph, then the essay; and that reading is decoding, followed by literal comprehension, which then leads to higher level inference and interpretation. What is most interesting is that Hirsch writes that he does not believe any of these notions in the text of Cultural Literacy, but the model he proposes follows those principles. This tendency to determine and limit forms regardless of intention is also a characteristic of technical rationality. Also, there is the possibility that Hirsch's system belies his rationale purposely for political reasons.

Technical Rationality and Political Conservatism

Hirsch is also a good example of how much this type of rationality appeals to conservative educators, especially those who promote the "efficiency" criteria of technical rationality. Ironically, these efficiency notions were originally promoted by the progressives these folks hate so much (Callahan). Nonetheless, "knowledge is not just power; it is also speed,"

says Hirsch in one article ("The Answer," 18), and the index for Cultural Literacy lists a "efficiency of communication" key word, among other efficiency quotes. Most of Hirsch's professional life has been spend trying to eradicate complexity and dualistic thinking in education; like most technologists he is looking for a unified theory, whether it be a "grapholect" or "schemata," that aims at a single, controllable end. Hirsch even evokes technology as a determinate of educational policy, "Because of the demands created by technology we need effective monoliteracy more than ever" (Cultural Literacy, 92).

But, intentionality is not necessary for control when technical rationality is employed. The non-dialogical form that technical rationality employs guarantees a limiting and controlling educational model. Paulo Freire has written eloquently about the undemocratic political consequences of non-dialogical structures of communication in education. The philosopher Jurgen Habermas has provided a cogent analysis of technical rationality in communication situations, clearly demonstrating the primary aim of technological views of humans and society to be the removal of dialogue from the social process. And, in what turns out to be an apt criticism of Hirsch, Habermas points out that technical visions of society and communication remove the ethics category from discussion of social issues.

A non-dialogical form of education is censorship even when it carries the best of intentions. Technical rationality presents a world-view that is reductive rather than constructive, and promotes a hierarchical one-way system of communication. Rather than being "content neutral," technical rationality presents technology as "neutral." But, technology is never neutral because it embodies the intention of those who design the system, especially since it is a form which serves to control (Habermas).

Conservatives are not just looking for unified content, but unified process (a "one-best-way" which is also "one-way-only"). Interestingly enough, theories of cybernetics and technology suggest that the dream of technical control of communication is not possible anyway. As the father of cybernetics, Norbert Weiner, claims, "Just as entropy tends to increase spontaneously in a closed system, so information tends to decrease. . . . (158-59). Technical systems are high-maintenance, and more time and energy is spent on repairing the system than on meeting the goals of the system. Hirsch's arguments for "efficiency" are not really served by the closed system he proposes.

Technical Rationality and Research on Language Learning

The way in which a technological model of the curriculum affects the language development of our students can be seen by comparing the nature of language learning with the nature of technological systems theory. Research on language development, from Vygotsky to Britton to Goodman to Graves to Howard Gardner, shows that:

- Dialogue is necessary for language development. Technological systems are monological by definition (and AI computers do not "actively" participate in meaning-making).

- Language tasks are approached holistically, not hierarchically or sequentially. Cognitive processing models (and much of developmental reading) are reductive, sequential and hierarchical (despite all the talk about schemata and parallel processing).

- Reading and writing are constructive and creative activities. Technical systems are designed to replicate data and control response.

• Reading aesthetically (as defined by Rosenblatt) and writing poetically (as defined by Britton) are necessary parts of learning to read and write. Technical models require, or at the least promote, efferent reading and transactional writing.

• Metaphor production can precede metaphor analysis developmentally (Gardner). Aesthetic use of language is not determined by prior knowledge or analytical abilities (Hirsch's argument says prior knowledge is necessary for literary understanding).

Technical models are inadequate when applied to human learning in general. Carl Rogers provided a trenchant analysis of the behavioral engineering models promoted for learning by B. F. Skinner, the behavioral messiah who tried to replace teachers with fool-proof teaching machines, quoting Skinner to the effect that: "As the use of science increases, we are forced to accept the theoretical structure with which science represents its facts. The difficulty is that this structure is clearly at odds with the traditional democratic conceptions of man" (390). Skinner goes to say that the democratic social philosophy is, "out of date and indeed an obstacle 'if it prevents us from applying to human affairs the science of man'" (390).

The cognitive science view of human cognition is a part of the "science of man" represented by behaviorism and cybernetics (Weiner), both technological reconceptualizations of human behavior, and shares their inherent biases:

• The very nature of cognitive science is that it sees the basic units of human thinking as data, not as ideas (Roszak).

• Computer modeling of human cognition produces reductivist models of human learning (by definition).

• Technical models of learning see reading and writing instruction exclusively as a goal-driven technological system (i.e., "reading or writing as problem solving").

• Technical communication systems, which tend to be "closed" systems, require high levels of maintenance, so more emphasis is put on maintaining the system than on transmitting information (Mueller). In other words, the technology becomes the object of attention, e.g., filling out worksheets instead of reading, studying test-taking procedures, taking cultural literacy tests instead of reading literature.

The artificial intelligence research already being applied to the classroom, providing specific views of the structure of thinking, is highly suspect even within its own domain of "intelligent behavior in machines." Many commentators express concern about the lack of an undergirding theory of mind and the reliance on computer programming as a substitute for human thought processes (Gardner; Johnson).

Theorists such as Douglas Hofstadter are considered outside the AI mainstream because they do not have appropriate computer programs to show to other AI researchers. According to Johnson, "If you don't have an acceptable program to show, philosophers may take you ideas seriously, but AI researchers will not" (290). Johnson also quotes John Seely Brown, director the intelligent-systems laboratory at Xerox's Palo Alto Research Center, on the issue of theory building about cognition using computer programming: "All too often you find scientists simply building a program that actually generates some interesting behavior -- interesting problem-solving behavior, interesting knowledge acquisition, interesting learning -- and saying, 'Aha, this is the model of the inner mind!'" (141).

Aesthetic Models in the Curriculum

To combat this form of censorship, this limiting form of educational technique that impinges on intellectual freedom, we need to look no further than two theorists well-known to most of us: Louise Rosenblatt's theories of reading and James Britton's theories of writing both posit the notion that the aesthetic is an integral part of literacy, and both assert that the aesthetic is not dependent on the technical. Technical and aesthetic discourse are interrelated in developmental terms, but not in a hierarchical relationship.

Technical rationality lead us to apply SQ3R (an example of technical rationality in reading and study skills) to literature study, and to ask the now famous: "What facts does this poem teach you?" that drove Rosenblatt to define aesthetic reading as a dialogical model. Britton's vision of poetic discourse, of writing in the role of spectator, shows the aesthetic as a necessary part of verbal expression. Britton presents a developmental model; Rosenblatt's dialogical conception of reading ties in rather neatly with Vygotsky's theories of language development.

We need to promote "creative" writing and aesthetic reading in our curriculum, based on models of human learning, not reductivist computer models. We need to allow for unarticulated response, unresolved ambiguity, collaborative learning and dialogue. We need to worry less about comprehension and business communication, and more about aesthetic reading and poetic writing.

Censors are not after journal writing simply because it invades privacy; censors do not like journals because journal writing promotes dialogue, and dialogue gives the impression that knowledge can be interpreted and questioned. Censors prefer a testable curriculum because it is a controlled curriculum. Censors prefer standardized tests about literature

content because it promotes efferent reading, and, as I have suggested, using exclusively efferent models to read literature is censorship.

Technical models are of a fundamentally different nature than aesthetic models. Aesthetic models are dialogical and generative; technical models are monological and replicative. Technical forms of thinking do not lead to aesthetic forms of thinking, any more than memorization of parts of speech leads to learning to write. Instead, aesthetic reasoning is necessary to break the self-replicating nature of technical rationality. Readers cannot read aesthetically if the only reading model at their disposal is a technical (efferent) one. Aesthetic knowledge cannot always be translated into a non-aesthetic, or technical, form. In technical rationality, nothing is legitimate unless it can be turned into a technical form.

Conclusion

AI and cognitive science models are technological models and technological models are for control. Controlled vocabulary is not a good way to teach reading; controlled cultural data is not a good way to teach the reading of literature. When we cooperate in putting our students in "reading" class and make them fill out worksheets, we are censoring, both because the worksheets keep them from reading and the technical form of language experience we provide is limiting by its very nature. When we study formal grammar instead of writing, we are censors. When we make students memorize cultural data before allowing them to read, we are censoring. We are limiting an essential part of our students' linguistic and social development when we assume the technical (the efferent stance in reading and the transactional function in writing) are the foundations of aesthetic reading and response.

The job of the English Educator is the preservation and promotion of aesthetic forms and this job requires the engendering of aesthetic forms of thinking and providing aesthetic experiences for our students. American culture's faith in machinery is leading us down a path where the aesthetic is only for those who can articulate culturally approved data, or into a world where aesthetic experience is only an educational frill. There is a role for the technical, but it is not the English teacher's primary function; in fact almost everyone else in the school promotes the technical, as do all the external administrative and testing interests. But, aesthetic experience is the key to critical thinking as well as creative thinking, and aesthetic experience (akin to science) breaks the controlling influences of technological systems.

Despite all the patriotic talk in the recent conservative educational agenda about freedom and access to middle-class culture, John Dewey spelled out the best criticism of the "superficiality" (Hirsch's word 16) explicit in the cultural literacy movement: "If [the student] has not powers of deliberation and invention, he must pick up his ideas casually and superficially from the suggestions of his environment and appropriate the notions which the interests of some class insinuate into his mind (428).

Censorship cannot stand against a defined program of aesthetic experience. Aesthetic experience opens the mind of the student and even the most restrictive and controlling censor cannot argue effectively for a life devoid of aesthetic response. If English Educators <u>emphasize</u> the aesthetic, then we are already taking a stand against censorship. If we promote the research that defines aesthetic reading and poetic writing, if we do not participate in the neglect and trivialization of the aesthetic then we are fighting censorship in the best way possible.

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